

# Mahoney Lake (Unionville City Lake)

Putnam County

2007 DATA



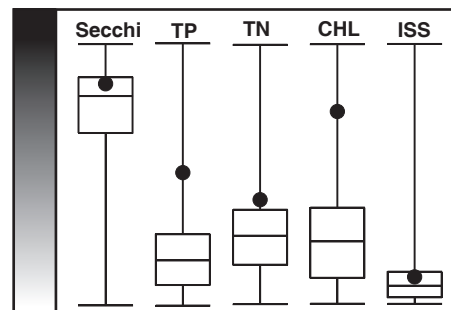
	Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
Site 1	6/15	34	198	1340	37.4	3.8
	7/23	25	133	900	61.2	5.6
	9/20	34	43	840	31.9	3.6
	<b>Mean</b>	<b>31</b>	<b>104</b>	<b>1000</b>	<b>41.8</b>	<b>4.2</b>
Site 2	6/15	45	193	1230	21.4	2.5
	7/23	20	115	900	45.3	10.1
	9/20	36	48	860	34.2	4.0
	<b>Mean</b>	<b>32</b>	<b>102</b>	<b>980</b>	<b>32.1</b>	<b>4.7</b>

2007 SUMMARY

Mahoney Lake was sampled three times at each of its two sites in 2007.

The two sites are nearly identical to one another, with only chlorophyll varying between the sites. Chlorophyll concentrations were 25% higher at the dam, perhaps due to a slight decrease in suspended solids.

The highest observed chlorophyll concentration in 2007 occurred on July 23 and did not coincide with the nutrient maximum. The June and July samples exhibit very low ratios of nitrogen to phosphorus (less than 7), which indicates possible nitrogen limitation of algal growth. This is a condition which often promotes the growth of blue green algae. It's possible that blue green algae are responsible for the observed July chlorophyll peak.



Relative Rank Graph  
See page 11 for details

TRENDS

The long-term graphs to the right show conditions at the dam (Site 1). Site 2 values are nearly identical, but there are no data prior to 2004.

Phosphorus concentrations at Mahoney lake were considerably higher in 2007 than observed in recent years. Nitrogen concentrations were typical, and very near the long-term mean.

Long-term phosphorus concentrations are higher than the proposed nutrient criteria limit.

While the 2007 chlorophyll concentration is well above the proposed limit, Mahoney Lake's long-term chlorophyll mean (not shown) is within the limit.

